OBSERVATIONS

ON THE DISEASED AND CONTRACTED

URINARY BLADDER,

AND

FREQUENT PAINFUL MICTURITION, &c.

THE diſeaſed and contracted urinary bladder, in ſome of its features, reſembles the *ſchirrous rectum*. Like that it produces a frequent and often fruitleſs ſtimulus to expulſion. It is alſo ſlow, but not equally ſlow, in its progreſs; and is to the full as dreadful in its conſequences, and as fatal in its termination. Although, like the *ſchirrous rectum*, it do not admit of being cured, it will ſometimes admit of palliation; and is equally an object worthy of the moſt ſerious attention from every humane practitioner.

This diſeaſe, to which, from a variety of obvious cauſes, men are much more liable than women, is in its moſt ſimple form often the mere natural conſequence of age and debility. The bladder, gradually contracting in its capacity, becomes at laſt little more than an additional *pelvis*

common to both kidneys, from which there is a conſtant involuntary *ſtillicidium*. When it puts on this mild and gentle, though diſguſting form, the patient is ſuppoſed to labour under a paralyſis of the ſphincter; and perhaps there may in fact be a real paralyſis of that organ. Nature accommodating herſelf to the change which has taken place in the ſize and ſtructure of the bladder, the ſphincter becomes relaxed and uſeleſs; ſo that during the remainder of life the urinal glaſs, or the linen and garments of the patient, becomes the only receptacle to anſwer the purpoſe of the natural reſervoir, the bladder.

This mild form of the diſeaſe may, I believe, be ſometimes prematurely brought on by the patient yielding upon every ſlight call to the habit of frequent *micturition*. The never-failing ſtimulus at the moment of retiring to bed, whether the bladder be full or empty, ſhews how much this evacuation may be governed by habit; and I have known men whoſe bladders were

were perfectly ſound acquire a ſimilar habitual ſtimulus at the approach of dinner or ſupper, or on paſſing any particular frequented corner. By a little attention, theſe injurious habits, into which perſons of a ſtudious and ſedentary diſpoſition, and thoſe who are in the decline of life, are moſt liable to fall, may be eaſily interrupted and corrected; and a ſound bladder will, with a little forbearance, gradually diſtend with eaſe to its natural ſize. I am not certain whether a habit of frequent micturition may not ſometimes have been brought on by a perſon unneceſſarily guarding too much againſt the oppoſite and more immediately dangerous extreme of imprudent and protracted retention.

The incontinence of urine or frequent micturition incidental to old age may be conſidered as a ſimple and chronical form of the diſeaſe; but there is another much more acute, though equally ſimple in its nature; I mean, the ſympathetic irritation ariſing from the uſe and application of

cantharides: this, however, is ſo well known, and, in general, ſo eaſily removed, that it does not merit our attention at preſent; nor would it have been mentioned here but for the ſake of thoſe patients who have already a tendency to diſeaſe in theſe parts. There can be no doubt but a bliſter, applied for any other purpoſe to a patient under theſe circumſtances, muſt be very apt to accelerate miſchief both in the bladder and urethra.

When the contracted bladder is not the conſequence of age but diſeaſe, it is generally the effect of previous inflammation from whatever cauſe ariſing; and I have long been convinced that gout is a much more frequent ſource of this inflammation than will perhaps be generally admitted. Repeated attacks of inflammation from this or any other cauſe thicken the coats of the bladder, and proportionably contract its cavity. The *rectum* ſympathizing with the bladder partakes of the ſame inflammation; adheſions come on betwixt theſe two *viſcera*, which, together with a

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preternatural accumulation of cellular ſubſtance, gradually forms a large diſeaſed maſs, which, by its weight preſſing on the *os ſacrum*, ſometimes impedes the deſcent of *fæces*, producing ſymptoms reſembling thoſe of the true *ſchirrous rectum*. I had lately an opportunity of ſeeing this appearance thus moſt ſatisfactorily accounted for in a caſe of contracted bladder accompanied with frequent and painful micturition, and have no doubt but it will be found upon enquiry not to be a very unuſual occurrence. RIVERIUS ſeems to have noticed this particular ſymptom, but erroneouſly aſcribes it to the weight of the inflamed bladder. "Rectum in-
"teſtinum affligitur propter viciniam, un-
"de crebra deſidendi cupiditas cum ar-
"dore procedit; aliquando etiam alvi
"ſuppreſſio, inteſtino a veſica inflammata
"compreſſo *." The ſtimulus and irritation of a bladder perhaps nearly empty and contracted, labouring under acute inflammation, may be propagated to the *rectum*, and excite *teneſmus*, or impede the

* Praxeos Medicæ, Lib. XIV. Cap. 3.

deſcent of ſtools by exciting ſpaſmodic conſtriction; but it can have little or no mechanical effect by its weight or compreſſion; this can only happen after repeated attacks of inflammation when the diſeaſe becomes chronic.

When this diſeaſed maſs of cellular ſubſtance thus preſſes upon and partially obſtructs the *rectum*, the neceſſary opiate medicines, adminiſtered for alleviating the painful ſenſations in the bladder and *urethra*, are very apt to haſten the progreſs and fatal termination of the diſeaſe. Difficulty in procuring an inteſtinal diſcharge is ſoon followed by hiccup and ſtercoraceous vomiting, which encreaſe the general debility of the ſyſtem, and are rarely conquered, though not ſpeedily fatal. I have known theſe ſymptoms continue day after day while the pulſe and the countenance and the temperature of the ſkin, as in the true *ſchirrous rectum*, gave evident ſigns that death, however ardently deſired, was ſtill at a diſtance.

Since theſe ſymptoms, but more eſpecially the hiccup, originate partly in a mechanical cauſe, it is in vain to harraſs the patient with large doſes of muſk, oil of cinnamon, æther, or any other medicine, adminiſtered with a view to quiet ſpaſm; calomel and ſuch purgative medicines as the ſtomach will retain, with the occaſional application of cold water to the abdomen, are alone uſeful; and theſe are again ſoon counteracted by the exhibition of opium, for which the afflicted patient will naturally call.

Although the contracted bladder may thus accidentally produce ſome of the ſymptoms common to the *ſchirrous rectum*, no attentive practitioner can ever be under any great difficulty in diſtinguiſhing the two diſeaſes. But the caſe is very different with reſpect to the *ſtone*, which excites every appearance common to the diſeaſed and contracted bladder. So much are the ſymptoms of theſe two morbid affections blended, that I believe the diſeaſed and contracted bladder never fails to excite,

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for a great length of time, the ſtrongeſt ſuſpicions of ſtone; which nothing but the actual introduction of the finger *per anum*, or of the *catheter* into the cavity of the bladder, by one or more careful and experienced ſurgeons, can remove.

Although the ſtone be capable of exciting every ſymptom common to the diſeaſed and contracted bladder, the latter does not occaſion every ſymptom common to the other. The peculiar feeling of a ſtone rolling or changing its poſition in the bladder is never mentioned; nor is it uſual in this diſeaſe for the urine to ſtop ſuddenly when paſſing in a full ſtream, as it is well known frequently to do in patients afflicted with the ſtone; neither is it uſual for bloody or coffee-coloured urine to be diſcharged in conſequence of riding in a carriage or on horſeback. But ſome patients afflicted with the diſeaſed bladder will void urine with greater eaſe and freedom in a recumbent than an erect poſture, which, when the abſence of ſtone has been well aſcertained, may always be aſcribed

aſcribed to the weight of the diſeaſed maſs contiguous to the bladder being by that poſture prevented from preſſing upon its neck.

To enumerate all the various ſymptoms common to both diſeaſes would ill agree with the intended brevity of theſe remarks. They are in general well known; and I have only to obſerve, that, when a patient labours under many of the ſymptoms common to the ſtone in the bladder, if none can be found upon examination, and there be not a ſtone actually lodged in a fold of the bladder (a rare occurrence), there will be little doubt that he is afflicted with the diſeaſe which is the ſubject of this Eſſay.

The frequent painful micturition ariſing from this affection has been often aſcribed to an ulcer at the neck of the bladder, or in ſome part of its cavity; and it muſt be acknowledged that the puriform mucous diſcharge gives ſome countenance to the opinion. But I believe it is now very

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generally known that the internal ſurface of the bladder, like that of the membrane of the lungs under the ſtimulus of inflammation, both acute and chronic, will afford a ſecretion ſo ſtrongly reſembling the diſcharge conſequent upon ulceration, as frequently to deceive the beſt eye and the ſoundeſt judgement.

Strongly as this diſeaſe reſembles the ſtone in the bladder, it may, I think, be in general diſtinguiſhed from it by a want of thoſe characteriſtics of *calculus* already noticed.

I wiſh it were in our power, with equal certainty, to diſtinguiſh the diſeaſe from a train of kindred ſymptoms which accompany ſtrictures in the *urethra*. At firſt it may be thought that the introduction of a bougie might decidedly aſcertain this point; but, unfortunately for our prognoſtic, the diſeaſed and contracted bladder is often accompanied by ſpaſmodic ſtrictures in the *urethra*. I have ſeen, for inſtance, a ſmall bougie in vain attempted

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to be introduced, and return twiſted into the form of a cork-ſcrew, when a warm catheter of the full ſize has, with a little patience and gentle perſeverance, entered the bladder, without giving much pain. It is alſo a very curious fact, that the contracted bladder and the real ſtricture of the *urethra* mutually produce each other. The former particularly, when labouring under diſeaſe, excites a frequent ſtimulus to expulſion, which irritates the paſſage, at firſt exciting ſpaſmodic and ſympathetic conſtriction, terminating after length of time in induration and permanent ſubſtantial ſtricture. On the contrary, when this is the primary diſeaſe, it excites obſtruction to the paſſage of urine and *ſemen*, and thus often occaſions difficulty and irritation, with frequent inclination to the diſcharge of urine; the conſequence of which is, that the bladder, being often irritated to expel its contents, gradually contracts in its ſize, and, being often ſubjected to painful efforts, thickens in its coats; and hence it becomes a ſource of much ambiguity to aſcertain the primary diſeaſe; which,

which, however, is an object of the utmoſt importance, both to the welfare of the patient, and the reputation of the ſurgeon.

Difficult as it may be to eſtabliſh this important diſtinction, it is, I am perſuaded, often to be done by an attentive and accurate obſerver.

If repeated and well-defined attacks of inflammation in the bladder, which, from a deference to the ſuperior knowledge of many of my readers, I will not preſume particularly to deſcribe, have preceded the diminiſhed ſtream of urine; and if the *urethra* of the patient hath never been ſubjected to the irritation of long-continued *gonnorrhœa*, or the uſe of acrid injections, it may be ſtrongly conjectured that the ſtoppage of a bougie in the middle of the *urethra* is no proof that the diſeaſe is confined to that paſſage; a prognoſtic, however, which may perhaps be juſtly made nineteen times in twenty, or forty-nine times in fifty, if the candour of the patient

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in diſcloſing the previous habits of his life do juſtice to the abilities and caution of his medical adviſer.

It may and has been aſſerted, that a miſtake of this kind can be of little conſequence, becauſe the ſtate of the bladder, whether it be diſeaſed from the irritation of a ſtone, or from a ſchirrous contraction and thickening of its coats, or from whatever other cauſe, cannot be aſcertained, till the obſtacle to the introduction of a proper inſtrument be removed. But, if the ſtricture in the *urethra* ſhould ſometimes be an effort of nature to ſtop the farther contraction of the bladder, by impeding the diſcharge of urine, the painful proceſs neceſſary for its removal will merely enable the patient to expel its contents, for a ſhort time, perhaps, with greater eaſe and freedom; the relief will be temporary and deluſive; the bladder will be enabled ſtill farther to contract in its capacity, and the frequent micturition will encreaſe with the facility; and, in a ſhort time, the pain, ſpaſm, ſtricture, and

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perpetual irritation, with all their fatal conſequences, will return with redoubled violence. It will therefore be much better, when we can aſcertain the diſeaſe to have been originally ſeated in the bladder, to be cautious how we attempt the removal of a ſtricture under ſuch circumſtances.

Should the ſpaſmodic ſtricture be at any time taken for a real and ſubſtantial obſtruction, much miſchief would enſue in attempting to remove it by any of the means commonly recommended for that purpoſe; but this is an error which I hope and truſt is not often likely to occur; the other muſt, without minute and moſt accurate attention to the preceding ſymptoms of inflammation in the bladder, be in a manner unavoidable.

In the contracted ſtate of the bladder which I have deſcribed, it is evident that all the ſymptoms of ſuppreſſion may come on when the bladder does not contain more than one or two ounces of urine, which will be as great a burthen and

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diſtreſs to a bladder highly contracted and diſeaſed as two or three quarts to one in its natural ſtate, capable of ſlow and gradual dilatation; and it is thus that I have more than once known an expert ſurgeon much ſurprized and at a loſs to account for the ſymptoms of ſuppreſſion when the catheter has been introduced, and not more than one or two table-ſpoons full of urine have been evacuated, with ſome trifling alleviation of diſtreſs, ſpeedily recurring. It will alſo ſometimes happen in this caſe, that the ſmall inteſtines will be loaded with flatulence and thin *fæces*, occaſioning tenſion and tumefaction immediately above the *pubes*, which will ſtill farther tend to deceive the ſurgeon. This laſt deception may be detected by preſſure with the hand, which will not immediately excite a ſtimulus to the diſcharge of urine; and, as the patient continues to exiſt with little food and frequent vomiting, the fulneſs and tenſion gradually diſappear.

This view of the ſubject leads to a circumſtance, which I conceive to be of ſome

importance at the preſent period. As I have already ſaid, the contracted and inflamed bladder is capable of producing ſympathetic contraction and obſtruction in the *urethra*, ſo a real ſtricture in that canal has a ſimilar effect on the bladder. Stricture in the *urethra* is always accompanied by frequent micturition: in proceſs of time the bladder contracts, from the want of dilatation; and, I believe, moſt experienced ſurgeons will recollect, that ſuppreſſions of urine from this cauſe much more frequently occur while the ſtricture is of a recent than of a chronic date. The membrane of the *urethra* and the internal ſurface of the bladder are at firſt much more ſuſceptible of ſympathetic irritation than at a later period, when they have undergone many attacks of inflammation, and become, in a manner, callous. A perſon labouring under a ſtricture of two or three years duration will be liable to ſuppreſſion of urine upon every accidental cold or irregularity; he will go through the whole painful and inconvenient proceſs of warm bath, bougie, catheter, &c.

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and, after a ſuppreſſion of ſeveral hours, will at laſt diſcharge three or four pints of urine. But, after the diſeaſe has got into a ſettled ſtate, the bladder will be contracted to a very ſmall ſize; and, if ſuppreſſion ſhould now take place, which, however, the patient will not be equally liable to undergo, painful and dangerous ſymptoms will come on with a very ſmall accumulation of urine.

The caution, which I wiſh to communicate, and which I feel myſelf particularly and irreſiſtibly called upon to do, is this, that they will ever keep in mind the diſtinction betwixt a ſtoppage of urine ariſing from a ſtricture of a recent or chronic date; becauſe, in one, the capacity of the bladder may be ſo large as to admit the whole length of the catheter or bougie to paſs without injury; but, in the other, it is very poſſible, that, from the time the point of the inſtrument has paſſed the fourth part of an inch beyond the neck of the bladder, it may be ſtopped by a thickened fold; or, if it paſs one inch or

one inch and a half farther, it may puſh againſt the *fundus*; whilſt the unwary practitioner may ſuppoſe, if he advert only to the length of bougie or of catheter introduced, that he has not paſſed beyond the proſtate.

In the introduction of the catheter an error of this kind will be of no other conſequence in the hands of a humane and ſkilful ſurgeon than to make him believe that he is unable to enter the bladder, at the very moment that the point of his inſtrument is puſhing againſt a wrinkled and thickened fold, or the *fundus* itſelf; and he will withdraw his inſtrument, ſuſpecting that he has failed in his attempt to introduce it; but the caſe may be very different in the hands of raſhneſs or ignorance. Under the influence of this deception, a bold, ignorant, or unfeeling practitioner may be tempted to uſe force ſufficient to produce fatal miſchief.

The uſe of the cauſtic bougie has not become ſo general as it merits, and as it ſoon

ſoon will; and I ſincerely hope theſe cautions may be publiſhed in time to guard the unwary againſt ſimilar miſtakes in the introduction of that inſtrument. Let us, for a moment, ſuppoſe a bold and perſevering ſurgeon to diſcover a real ſtricture of long ſtanding in any part of the *urethra*. He makes way through this obſtruction by means of the cauſtic bougie, and, in due time, paſſes a common bougie into the bladder; but, not adverting to the contracted, thickened, and diſeaſed ſtate of that *viſcus*, the point of his bougie meets with a ſecond obſtruction from a wrinkled fold, or the *fundus* of the bladder, an inch or an inch and a half ſooner than he believes he can poſſibly have gone beyond the *cervix*. The conſequence will be that he will ſuppoſe he has found a ſecond ſtricture, which is a very common occurrence, and will not heſitate to apply his cauſtic bougie to the internal ſurface of the bladder, by which he muſt inevitably excite intolerable pain, with inceſſant and ineffectual ſtrainings towards micturition, and expoſe the life of his

patient to the moſt imminent danger, to no manner of purpoſe; perhaps, after he have given him the ſtrongeſt aſſurances of a ſafe, ſpeedy, and effectual cure.

There is no admeaſurement of the length of the *urethra* from the extremity of the glans to the neck of the bladder that can be depended on for preventing a miſtake of this kind, becauſe an horripilation of half a minute is capable of making an alteration of two inches or more in the length even of an *urethra* already flaccid.

The beſt mode of proceeding then muſt be, whenever the armed bougie is to paſs within the verge of the *ſphincter ani*, to accompany it with the finger in the *rectum*, which will, if neceſſary, diſtinctly trace its progreſs, till it touches and is loſt in the proſtate gland.

If I am fortunate enough to guard the unwary or inexperienced practitioner againſt making an erroneous prognoſtic to the detriment of a patient labouring under circumſtances

cumſtances of lamentable diſtreſs, I ſhall in a great meaſure have attained the object which I had in view when I ſat down to communicate my thoughts on this ſubject. I have little to add reſpecting the *methodus medendi*, having been myſelf always hitherto content with recommending the palliative cure alone; and ſince this chiefly conſiſts in the abſtraction of all ſtimulating food and of every irritating circumſtance, with the exhibition of mild and gentle medicines, it would be treſpaſſing on the time of my readers, were I to enlarge upon it here. Mr. Foot, who has had much experience in the treatment of diſeaſed bladders and obſtructed *urethræ*, has lately ſuggeſted the propriety of attempting to cure the contracted bladder by the injection of mild liquids, with a view to effect a gradual dilatation of its coats. He has produced ſome ſucceſsful and ſatisfactory caſes in addition to the ſolitary one firſt mentioned by Le Dran, confirming the propriety of the practice; and his obſervations on the ſubject appear to me to merit the moſt ſerious and candid attention

of the faculty. Where the bladder is merely thickened and contracted, without being in other reſpects materially diſeaſed, this method bids fair to be extremely advantageous; and in the moſt diſeaſed ſtate of that cavity cannot, under gentle and prudent management, be attended with any diſadvantage.

With regard to the cure of ſtrictures in the *urethra*, which have fallen, as it were, by accident, under my notice, I muſt obſerve, that the very excellent and ſcientific treatiſe of Mr. HOME on this ſubject has placed the ſafety and propriety of introducing the cauſtic bougie in ſo ſtrong and ſo favourable a point of view, as completely to remove all the dread and reluctance which it is impoſſible for the mind not to entertain at the firſt contemplation of the propoſal; and I am ſo perfectly ſatisfied with the great importance of this mode of cure, that it will give me the ſincereſt pleaſure if I have it in my power to ſuggeſt an improvement in the method of applying the cauſtic, which may

may thus be done—but firſt let me obſerve, that the poſſibility of a piece of cauſtic being forced out of the end of a bougie by the ſpaſmodic action of the *urethra* is alone ſufficient to excite horror and alarm in the mind both of patient and ſurgeon. We have heard of inſtances where this has happened with impunity; and I know of one in particular in which it was decidedly advantageous; but this is a chance which no ſober ſurgeon would wiſh to run; and it is not probable that the very dangerous and miſchievous conſequences moſt likely to enſue from ſuch an accident will ever be blazoned abroad by the parties intereſted in ſuppreſſing the fact.

By macerating a longer or ſhorter time in hot water, a bougie or urethral probe made of poliſhed whalebone will acquire any degree of ſoftneſs and pliability that may be required; and, as I have already obſerved in my treatiſe on the *ſchirrous rectum* will adapt itſelf to the natural curvature of the paſſage without being

being ever liable to break; and, ſince it contains no wax nor unctuous ingredient, muſt be much leſs liable to ſtimulate the *urethra* than the common bougies, and cannot eaſily be impaired in its properties. The extremity of ſuch a bougie is to be of the common thickneſs, and the point ſhould have a ſmall depreſſion, to the bottom of which a little adheſive plaiſter, or any other viſcous ſubſtance, may be applied; after which, let it be lightly touched with a thin coat of powdered lunar cauſtic, which will be perfectly ſecure; and the operator will thus have it in his power at any time to convey the preciſe quantity which he wiſhes to apply at once, from a quarter of a grain to a grain, without the ſmalleſt danger of a larger being diſengaged.

This inſtrument has been ſuggeſted to thoſe ingenious artiſts, SAVIGNY, in King-ſtreet, Covent-Garden, and PEPYS, in the Poultry, from whom they may be obtained

tained of all ſizes; and, by their aſſiſtance, I expect very ſoon to produce a hollow bougie of the ſame ſubſtance preferable to any other for the purpoſe of a flexible catheter applicable in ſome caſes to the diſcharge of thin *fæces* through the contracted *rectum*.

OBSERVATIONS

ON THE

SCHIRRO-CONTRACTED RECTUM,

FROM THE SECOND VOLUME OF

MEMOIRS OF THE

MEDICAL SOCIETY OF LONDON.

A PAPER, TO WHICH THAT SOCIETY ADJUDGED
A PRIZE MEDAL FOR THE YEAR
1788.

P. 45. l. 11. *read,* "thereby enable him"

P. 54. l. 21. *ſtrike out the comma after* "ignes."

THE diſeaſe of which I am about to treat is not peculiar to either ſex; but is, I believe, pretty generally confined to patients in an advanced period of life. It comes on in the moſt gradual and imperceptible manner. Slow in its progreſs, but terrible in its conſequences, it yields not to medical aſſiſtance; but muſt, under the beſt management, become ultimately fatal. It admits, however, of palliation, and, if early diſcovered, will alſo admit of the laſt moments of the patient being reſcued from unavailing, miſtaken, and diſtreſſing attempts to cure. It is therefore an object worthy of the moſt ſerious attention of every humane practitioner. For, though we cannot cure, it is our duty to ſmooth the bed of death, and, under the moſt unhappy circumſtances of diſeaſe, to prolong life as far as lies in our power.

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There is no diſeaſe to which the human frame is incident that is more liable to be miſunderſtood; *diarrhœa*, *dyſentery*, *teneſmus*, colic, painful diſtenſion of the abdomen, inflammation in the bowels, and iliac paſſion, which are each of them formidable and often fatal diſeaſes in themſelves, may be ſucceſſive ſymptoms only of the *ſchirrous rectum*. Under ſome one of theſe appearances it is highly preſumeable, that many patients have died without the real cauſe having ever been aſſigned or ſuſpected; and even when it is ſuſpected, and becomes an object of manual inveſtigation, it may eaſily be miſtaken for an enlargement of the proſtate gland, or a *ſchirrous uterus*.

The patient gradually experiences a difficulty in evacuating *fæces* of a thin conſiſtence. There is a principle of accommodation in the human ſyſtem, which enables him to go on for a great length of time without applying for aid. As the paſſage becomes obſtructed, the *fæces* acquire a thinner conſiſtence, and the firſt complaint

complaint which he makes is of a looſeneſs. He tries ſmall doſes of rhubarb, which, perhaps, exciting a conſiderable diſcharge, procure relief; but the cauſe remaining, the ſymptoms again return. He now tries *colombo* root, *ſimarouba*, ſmall doſes of *ipecacuana*, and a variety of medicines recommended for *diarrhæa* or dyſentery. Theſe have little effect, and he continues, in other reſpects, apparently in good health. His appetite is but little impaired; reiterated ſcanty evacuations, amounting in the whole to a ſufficient quantity to keep the ſtomach eaſy, preſerve a ſort of balance in the inteſtinal canal; but, by degrees, the cavity of the gut becomes leſs permeable; opiates and teſtaceous powders have perhaps been had recourſe to, and the frequent needing to ſtool abates. The patient and his friends flatter themſelves that he is getting well. But he now gradually falls off in his appetite for food. The abſence of ſtools is for ſome time attributed to this cauſe, till the lower part of the abdomen by degrees acquires a remarkable prominency, at-

tended with uncommon rumbling of wind in the belly, like the gurgling of water in a bottle. Theſe two laſt circumſtances, perhaps, afford pathognomonic ſymptoms of this diſeaſe; more eſpecially when accompanied with frequent but ſcanty diſcharges of thin, dark-coloured, ſlimy *fæces*; often not more than a tea-ſpoonful, ſeldom exceeding at one diſcharge a larger quantity than a table-ſpoonful. But to return: the patient makes ſeveral ineffectual attempts to go to ſtool, and, if he be a man of natural good ſenſe and penetration, begins to ſuſpect that there is ſome mechanical obſtruction to the completion of his wiſhes. His phyſician, if he have not ſooner taken up this idea, now enters heartily into it, and will naturally ſuſpect an accumulation of hardened *fæces*, which often produce for a long time the ſame ſymptoms as a real *ſchirrus* of the part. In fact, the obſtruction in both caſes is mechanical, and hardened *fæces* in the rectum, too bulky to be evacuated, almoſt always produce a looſeneſs; ſcanty evacuations of thin *fæces*, formed from the retention

tention of the general contents of the bowels, every now and then eſcaping paſt the hardened ball, keep up at leaſt the appearance of a looſeneſs. Under this idea he will have recourſe to calomel or caſtor oil, and will perhaps ſucceed. If the obſtruction is from hardened *fæces*, the finger generally is neceſſary; but when it proceeds from a ſchirrous gut, the cathartic may poſſibly produce a plentiful diſcharge of thin *fæces*; the ſymptoms will for a time ſubſide, but by degrees they will again return; there will again be a conſtant needing, with ſlimy ſcanty evacuations, and the diſorder will now be pronounced a *teneſmus*. If an attempt be made to throw up warm water or milk to waſh the part and leſſen irritation, the operator will experience nearly the ſame difficulty in getting the liquid up which the unhappy patient hath found in expelling the contents of the bowels. If a female aſſiſtant perform this office, ſhe will tell an inattentive practitioner, that it goes up very well; but the whole will be waſted and received in the cloths, and

the patient, doubly cheated, firſt, of expected relief, and, ſecondly, diſappointed in his phyſician's acquiring that information ſo eſſential to his future comfort: if a ſurgeon, he will find, upon forcing the liquid into the gut, that a few ounces will apparently paſs well, but ſoon a forcing downwards on the part of the patient takes place, and the whole will return into the bladder in his hand. He may repeat his efforts ten times, and the regurgitation will as often follow, and perhaps not a table-ſpoonful of the *enema* will be loſt. At laſt he may poſſibly ſucceed, the *enema* may be forced beyond the obſtructed part; but it will there be retained an unuſual length of time, and will come away at laſt by little and little. In the courſe of this taſk he will doubtleſs introduce his finger, and will flatter himſelf at firſt that he feels a lump of hardened *fæces*; but, upon the patient's bearing down forcibly, he will diſtinctly feel the coats of the inteſtine betwixt his finger and the lump, which, if it happen to be ſituated on the ſide of the gut in contiguity

with

with the bladder, he may conceive to be an enlarged proſtate, but a free diſcharge of urine will diſcountenance ſuch idea. If the hardneſs and tumefaction is attached to the *cervix uteri*, or the back part of the *vagina*, it may eaſily be miſtaken for a *ſchirrous uterus*.

By degrees a total ſuppreſſion of ſtools takes place, the tumour in the abdomen encreaſes, the uncommon rumbling of wind becomes more audible, ſo as to engage the attention of the friends and viſitants of the patient. The diſtenſion gradually encreaſes, till the ſtomach is oppreſſed, and a vomiting comes on. The vomiting is not very frequent at firſt, but by degrees every thing ſwallowed is vomited up; ſevere pains are felt from diſtenſion in various parts of the abdomen, and a true iliac paſſion of the chronic kind comes on, and continues as long as the patient lives, unleſs he be accidentally relieved by a free diſcharge of thin *fæces*, which will ſometimes unexpectedly give a reſpite to his ſufferings. In conſequence of which, the appetite for food will again

return, the patient will again appear to be getting well; but the anxious ſolicitude of his friends at this period will urge him to get down conſiderable quantities of generous nouriſhment, till at laſt a repetition of the ſame ſcene takes place, and the unhappy man is alternately tantalized and worn out either by a ſtoppage or a purging.

If aſſiſtance is not called in till the patient arrive at this deplorable ſtate of the diſeaſe, the want of ſtools, the great pain, vomiting, and tenſeneſs of the abdomen, may be pronounced an inflammation of the bowels, or an iliac paſſion of the acute kind. If powerful means are employed under ſuch idea, it is eaſy to conceive that the laſt moments of the patient muſt be rendered doubly diſtreſſing.

The conſtant needing to ſtool which attends this diſorder, may be diſtinguiſhed from a common *teneſmus* by attending to the following circumſtances. A common *teneſmus* is generally ſudden in its attack,

or

or it follows ſevere purgings or dyſenteries, where the preceding circumſtances have been well defined. It is often the conſequence of draſtic cathartics, and is always attended with conſiderable pain, and moſt frequently with a *mucous* diſcharge tinged with blood, inſtead of *fæces*; whereas that which accompanies the *ſchirrous rectum* is attended with little or no pain, but with powerful ineffectual ſtrainings; during which, there will often be a diſcharge of wind, and the *mucus* ſqueezed out is ſlimy, but always more or leſs black and excrementitious, very ſeldom tinged with blood. In the common *teneſmus*, the *impetus* ſeems entirely ſpent on the *ſphincter ani*, and there is more or leſs of a protruſion of the gut: but in the ſtraining from a *ſchirrous rectum*, the patient is not ſenſible of that extreme diſtreſs at the fundament which is experienced in the other, and as ſoon as a ſmall portion of excrementitious *mucus* is voided, he is able to riſe immediately from the ſtool; but in a common *teneſmus* he is under the neceſſity of ſtraining long,

even after the expulſion of all that he knows from his feelings will at that effort be evacuated, and, after he is able to riſe from the ſtool, there ſtill continues a burning pungent ſenſation, urging to a continued expulſion. Whereas in the *teneſmus* of which I am treating, after the patient has ſtrained hard, whenever a ſmall quantity of thin *fæces* arrives at the anus, it is ſquirted out with ſlight efforts, and little or no uneaſineſs follows; nor does the countenance ſhew that extreme diſtreſs attendant on the ſpaſmodic ſtricture of a common *teneſmus*.

When the preceding ſymptoms have not been known, it will be leſs eaſy to diſtinguiſh this malady from the true *volvulus*, or acute iliac paſſion. It is preſumed, however, that they may be thus diſcriminated: this obſtruction being ſituated within a few inches of the extremity of the inteſtinal canal, does not produce ſuch enormous pain, ſuch exquiſite anxiety, as when it is ſeated higher up, or in the ſmall inteſtines; nor do the

powers

powers of life ſo ſoon give way. The patient ſwallows food, he retains it ſome time, and is apparently nouriſhed by it, for his pulſe keeps up in a ſurprizing manner, and the phyſician may pronounce, day after day, that his patient is far from being arrived near the termination of his ſufferings, for which, however, he ardently longs. But, in the true iliac paſſion from inflammation, *intus-ſuſception*, or incarceration in the ſmall inteſtines, the powers of life almoſt immediately ſink, the countenance is deſcriptive of miſery, the pains are intolerable, the patient toſſes and writhes his body to and fro, and whatever is ſwallowed is inſtantaneouſly returned; in a ſhort time, a ceſſation of pain takes place, and the ſkilful obſerver can, almoſt to a certainty, predict the hour of diſſolution, at the time that the friends and the patient are even beginning to flatter themſelves with hopes of his recovery.

As ſoon as we are able to aſcertain the true nature of this diſorder, it will be neceſſary

ceſſary to make the patient ſenſible of it, and thoroughly underſtand it, that his ideas may go along with ours, and co-operate in the future plan for his comfort. Nor will this be very eaſily accompliſhed; it muſt appear ſtrange to the patient, who has long known himſelf to be afflicted with a looſeneſs, to be told that it is neceſſary, during the remainder of his life, to confine himſelf to that regimen, which common experience points out as moſt likely to procure an open belly. And, even admitting that we have gained over the underſtanding of the patient, we ſhall be liable ſtill to interruption, from the intruſion of well-meaning friends and neighbours, with whom a perpetual war muſt be waged.

Food which contains the greateſt quantity of nouriſhment in the ſmalleſt compaſs ſhould be uſed, cautiouſly avoiding every article of this kind which is of a conſtipating quality. It ſhould be taken frequently, but ſparingly. All ſolid food, and particularly bread, pudding, and farinaceous

rinaceous ſubſtances, which contribute to bulky motions, ſhould be totally laid aſide. Milk, which may be conſidered as chyle already made, would be excellent nouriſhment, but there are ſome reaſons to ſuſpect that it is often productive of hardened *fæces:* its uſe, therefore, muſt be determined by the former habits of the patient when in health. Jellies and rich broths will afford conſiderable nouriſhment, and will depoſite little that is not capable of paſſing off by the kidneys. It is impoſſible, *à priori*, to ſay how long the human ſyſtem may be comfortably ſupported under ſuch diet, with very ſcanty evacuations by the anus. It is certain that men have lived, in good health and ſpirits, a fortnight, without voiding any ſtool whatever, notwithſtanding they have eaten and drank during the whole time with good appetite. If this plan ſhould be adopted whilſt the *rectum* is in part pervious, the very ſcanty evacuations will bear a much larger proportion to the *ingeſta*, than when food of various kinds is indiſcriminately and plentifully ſwallowed.

I have

I have already mentioned a certain accommodating diſpoſition in the animal œconomy, by which it becomes reconciled to new ſituations. It is worth while to pay more attention to this circumſtance here, becauſe upon this accommodating diſpoſition I build my hope of rendering the laſt moments of the patient ſupportable. As the gut contracts, the contents of the bowels are impeded in their progreſs, they undergo a degree of fermentation, the *fæces* become thinner, a large quantity of air is generated, the bowels are thereby gradually diſtended, and the patient goes on with little inconvenience for a conſiderable length of time. At laſt there is a total ſuppreſſion of ſtools, and, ſoon after, the ſtomach begins to regurgitate. That progreſſive motion of the bowels, called periſtaltic, ceaſes to operate downwards; by degrees it takes a contrary turn, and acts as regularly upwards; and even now, under theſe unhappy circumſtances, if the patient be left to nature, he will feed, he will be nouriſhed; the diſcharges of urine and perſpiration will go on,

on, and the ſtomach will reject what it is not capable of digeſting. How long life may be thus ſuſtained when medicine is diſuſed is unknown. It muſt be acknowledged, that life under ſuch circumſtances cannot be deſirable; ſtill, however, it is the duty of the phyſician to prolong that life to the utmoſt of his power, and to uſe his beſt endeavours to lighten the affliction of the unhappy patient, and thereby to enable him the better to ſubmit to the diſpenſations of Providence.

In this laſt ſtage of the diſeaſe, every cathartic becomes a diſtreſſing emetic, and ſhould doubtleſs be no longer uſed. Indeed, admitting that the periſtaltic motion of the bowels were not inverted, yet when the ſtoppage is complete, there will be the ſame objection to cathartics, which forcibly ſtrikes us in regard to the uſe of diuretics in a ſuppreſſion of urine. Diuretics in ſuch caſes counteract the accommodating diſpoſition of the animal œconomy; they ſtimulate the kidneys to a larger ſecretion of urine, and the bladder

of

of courſe every moment becomes more and more diſtended: whereas, if diuretics and diluents were totally diſuſed, abſorption would conſiderably relieve the patient, and, perhaps, enable him to ſupport life till more effectual relief might be obtained from mechanical means. Catheters and bougies for a ſuppreſſion of urine are in the hands of every practitioner, and theſe may doubtleſs be contrived (particularly the elaſtic ones) to give relief in a ſuppreſſion of thin ſtools. Strongly impreſſed with the importance of this idea, I beg leave to lay the following caſe before the Medical Society, together with the diſeaſed part, which I have ſent for their inſpection; as, I truſt, they will clearly ſhew, not only the practicability, but the abſolute neceſſity, for ſome attempt of this kind.

CASE

CASE

OF

A SCHIRROUS RECTUM.

ELIZABETH SHAKESHAFT, aged 52, a woman of a thin and ſallow countenance, applied to me about the latter end of the year 1786, for a pain in her bowels, which, upon aſking her ſome queſtions, and from obſerving ſome little unuſual prominence of the abdomen, I apprehended aroſe from a want of ſtools, notwithſtanding ſhe had ſome degree of looſeneſs upon her. She was conſiderably relieved by a doſe of caſtor oil. In two or three weeks ſhe was obliged to apply to me again, and was again relieved in the ſame manner. The ſame ſymptoms conſtantly recurring about the ſame diſtance of time, induced me to pay more particular attention to her complaints. I now preſcribed calomel, which acted very briſkly,

briſkly, and, with the help of an anodyne draught, gave her conſiderable relief. The diſcharge was dark-coloured, but free from lumps. As uſual, however, about the ſame diſtance of time, ſhe was again obliged to apply for aſſiſtance, and begged to have another doſe of the little ſpitfire powder, as ſhe called the calomel. I now began to pay a ſtrict attention to the diſcharge of *fæces* when ſhe was not under the operation of cathartics, and found them ſuch as I have already deſcribed in my general remarks on this diſeaſe, which will render a minute deſcription of the caſe leſs neceſſary here. I was now convinced that the complaint proceeded from ſome mechanical obſtruction; though this could not be accurately aſcertained by examination with the finger, the point of which, upon her bearing down ſtrongly, juſt reached a ſubſtance unuſually ſolid: upon introducing a finger into the *vagina*, the *os tincæ* was diſtinctly felt apparently in its natural ſtate; but cloſely attached to it, and a very little nearer, the ſame ſolid ſubſtance was felt which oppoſed

itſelf

itſelf to the finger in the *rectum*. I ſatisfied myſelf that it was not hardened *fæces*, but ſuſpected it to be an irregular enlargement of the *uterus*.

Being now convinced that the caſe would go on from bad to worſe, I earneſtly ſolicited her to procure advice in London; but, to my great concern, having implicit confidence in myſelf, ſhe long objected; till at laſt a humane lady in her neighbourhood aſking my opinion of the complaint, I pronounced it an incurable one: aſſuring her, that either from a ſchirrous womb or ſome ſolid ſubſtance obſtructing the gut, there was not a ſufficient paſſage for natural figured ſtools, and that I knew of no means even for temporary relief beſides purging medicines and thin diet. Upon this alarming prognoſtic it was determined to remove her to London, from whence at firſt we received very flattering accounts, *viz.* that ſhe had had ſtools, that her appetite was returned, and that ſhe was recovering faſt. Ten days, however, were hardly elapſed,

before a very different account was brought down: we were now informed, that the diſorder had taken a new turn, that it had got up into her ſtomach, and that ſhe was worſe than ſhe had ever been before. Anxious to put herſelf again under my care, ſhe returned to Enfield in the beginning of April. I was not ſurprized to find her with frequent hiccups, violent pains, an enlarged abdomen, and a total ſuppreſſion of ſtools. Her ſtomach immediately rejected caſtor oil, and her favorite medicine calomel ceaſed to take effect. I muſt here candidly confeſs, that, had this been my firſt introduction to the caſe, I ſhould not have ſuſpected the true cauſe of the ſymptoms. Some ineffectual attempts having been made to give relief by means of tobacco clyſters and tallow-candles, ſhe was reſigned to her fate; and it will be ſufficient to add, that ſhe lingered twenty-four days without paſſing a ſingle tea-ſpoonful of *fæces*. Towards the concluſion of the ſcene, I was happy in having an opportunity of carrying Dr. Lettſom to be a witneſs of it. The

Doctor,

Doctor, ever ready to give his aſſiſtance to the poor, judiciouſly, but in vain, examined the navel and the groins, leſt any ſmall unobſerved *hernia* might have given riſe to the ſymptoms. On the tenth of May ſhe expired.

The body was opened the next day in the preſence of Mr. Connop, an ingenious ſurgeon, and the appearances upon diſſection were as follow:

The ſtomach and the whole inteſtinal canal were turgid with *flatus*. There were evident marks of inflammation on the external coats of the colon, and in ſeveral parts of the ſmall inteſtines. There was a conſiderable quantity of thin, yeaſty, frothy, dark-coloured, *fæces*, in the colon. We found the ſeat of the diſeaſe where the colon ends and the *rectum* begins; the gut was thickened and conſiderably enlarged, but its cavity at the ſame time ſo much obliterated, that, when Mr. Connop poured water into the ſuperior part of the gut through a funnel,

it was with ſome difficulty that it filtered through the thickened inteſtine. When the parts were diſſected out, it meaſured exactly five inches and a half from the *anus* to the beginning of the tumor, which extended five inches and a half farther up, and appeared to be about ten ounces in weight. Upon ſlitting the inteſtine to the thickened and contracted part, it had the appearance each way of an *os tincæ*, but was not in the nature of a common *intus-ſuſceptio*. The *uterus* was remarkably ſmall, and attached to the thickened gut which extended a very little below the *os tincæ*. I tried in vain to paſs a ſmall bougie through the contracted part of the inteſtine, but it yielded to and was dilatable by the finger. In the living ſubject this might probably have been effected by paſſing a common probang up the *rectum*; or we might have ſucceeded by the uſe of bougies of different ſizes, made of horn (or whalebone,) ſmoothly poliſhed, which I would certainly try in future in any ſimilar caſe. This ſubſtance, by immerſion in boiling water, becomes

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ſoft and pliable, and will retain its ſoftneſs ſome time after it is removed from the boiling water. It will adapt itſelf to the natural curvature of the *pelvis*, and ſhould be carried on to the obſtructed part ſlowly, gently, and ſteadily, with the utmoſt tenderneſs and circumſpection, but at the ſame time with ſufficient force and reſolution. There are caſes of ſuppreſſion of urine in which bougies of horn or whalebone ſoftened by means of boiling water, would probably adapt themſelves to the part, and give much relief. The great danger will be in the point of the bougie acting upon a fold of the inteſtine, cloſe to the entrance into the obſtruction. If it once paſſes through the obſtructed part, there will be a plentiful diſcharge of thin *fæces*, and the diſorder will be again brought back to a *diarrhœa*, in which ſtate every poſſible means conſiſtent with ſupporting the ſtrength of the patient ſhould be uſed to continue it. There are frequent inſtances of daily purgings being ſupported many years by old perſons; and, perhaps, there is reaſon to ſuppoſe, that

ſuch

ſuch purgings often ariſe from a ſimilar contraction in the *rectum*.

I will here candidly confeſs, that I have myſelf attempted to cure ſuch a purging from a *ſchirrous rectum*, which attempt produced a dangerous ſtoppage. The purging was again brought back by caſtor oil, and the patient relieved. It was again ſtopped, and the ſtoppage followed by tumefaction of the abdomen, rumbling of wind in the bowels as already deſcribed, and regurgitation from the ſtomach. I have ſeen this patient, after twenty hard ſtraining motions, void only ſo many drops of ſlime, tinged with *fæces*. The purging was a fourth time brought back by means of caſtor oil, but the ſtrength of the patient ſo much exhauſted that he did not long ſurvive it. To be more particular in this caſe would be "incedere "per ignes, ſuppoſitos cinere doloſo:" ſuffice it to ſay, that, after the firſt ſtoppage, my prognoſtics were confirmed in every future ſtage of the complaint; and that knowledge acquired, which I have here

here endeavoured faithfully to communicate. And happy ſhall I be, if this imperfect ſketch of a diſeaſe, which I have reaſon to think is not generally known, ſhall, in any future inſtance, be the means of a timely diſcovery of its true nature and cauſe; on a knowledge of which depend the right management and future comfort of the patient's life.

POST.

POSTSCRIPT.

SINCE the publication of the above Paper, I have been conſulted in ſeveral melancholy caſes of this diſeaſe, and have, in ſome inſtances, promoted a diſcharge of thin *fæces* by the introduction of a rectum-probe made of poliſhed whalebone.

In one unhappy caſe, that of the late Mr. Hoare, of Enfield, the purging had exiſted and been managed with tolerable comfort upwards of twenty years; but the gut became at laſt ſo much cloſed and diſeaſed, that the *fæces* made a paſſage into the bladder; and, during the laſt month of his life, not a drop was diſcharged except through the *penis*, from which it was almoſt conſtantly ouzing mixed with urine.

THERE are ſymptoms connected with the diſeaſed bladder and *rectum*, which have been often erroneouſly aſcribed by medical men of high reputation and real ability to an enlargement of the proſtate gland. It is therefore the duty of every practitioner, ſince that gland lies within the reach of his finger, to take the earlieſt opportunity of examining and aſcertaining its condition. In thoſe caſes, which have fallen under my obſervation, I have moſt frequently found it in a ſtate of extenuation.

FINIS.